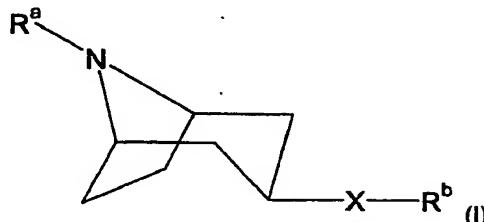


CLAIMS

1. An 8-aza-bicyclo[3.2.1]octane derivative of the Formula I:



5

or any of its isomers or any mixture of its isomers,
or a pharmaceutically acceptable salt thereof,
wherein

R^a represents hydrogen or alkyl;

10 which alkyl is optionally substituted with one or more substituents
 independently selected from the group consisting of:

halo, trifluoromethyl, trifluoromethoxy, cyano, hydroxy, amino, nitro,
alkoxy, cycloalkoxy, alkyl, cycloalkyl, cycloalkylalkyl, alkenyl and
alkynyl;

15 X represents $-O-$, $-S-$ or $-NR^c-$;

 wherein R^c represents hydrogen, alkyl, $-C(=O)R^d$ or $-SO_2R^d$;
 wherein R^d represents hydrogen or alkyl;

R^b represents an aryl or a heteroaryl group,

20 which aryl or heteroaryl group is optionally substituted with one or more
 substituents independently selected from the group consisting of:
 halo, trifluoromethyl, trifluoromethoxy, cyano, hydroxy, amino, nitro,
 oxo, alkoxy, cycloalkoxy, alkyl, cycloalkyl, cycloalkylalkyl, alkenyl and
 alkynyl.

2. The chemical compound of claim 1, wherein
 R^a represents hydrogen.

25 3. The chemical compound of claim 1, wherein
 R^a represents methyl.

4. The chemical compound of any one of claims 1-3, wherein
 X represents $-O-$.

30 5. The chemical compound of any one of claims 1-3, wherein
 X represents $-S-$.

6. The chemical compounds of any one of claims 1-5, wherein
R^b represents an aryl or a heteroaryl group,
which aryl or heteroaryl group is substituted with one or more substituents
5 independently selected from the group consisting of:
halo, trifluoromethyl, trifluoromethoxy, cyano, oxo, alkyl and alkoxy.
7. The chemical compound of any one of claims 1-5, wherein
R^b represents a phenyl group,
which phenyl group is optionally substituted with one or more substituents
10 independently selected from the group consisting of:
halo, trifluoromethyl, trifluoromethoxy, cyano and alkoxy.
8. The chemical compound of any one of claims 1-5, wherein
R^b represents a thienyl group,
which thienyl group is substituted with one or more substituents
15 independently selected from the group consisting of:
halo, trifluoromethyl, trifluoromethoxy, cyano and alkoxy.
9. The chemical compound of any one of claims 1-5, wherein
R^b represents a pyridyl group,
which pyridyl group is substituted with one or more substituents
20 independently selected from the group consisting of:
halo, trifluoromethyl, trifluoromethoxy, cyano, hydroxy and alkoxy.
10. The chemical compound of claim 1, which is
endo-3-(3,4,5-Trichlorothiophen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
endo-3-(3,4-Dichlorothiophen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
25 *exo*-3-(3,4,5-Trichlorothiophen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(1,2-Benzoisothiazol-3-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(5-Bromothiazol-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(Benzothiazol-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
30 *exo*-3-(6-Chlorobenzothiazol-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(Quinoxalin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(Quinolin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(Benzoxazol-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
35 *exo*-3-(6-Chloro-pyridazin-3-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(5-Chloro-pyridin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(Isoquinolin-1-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;

- exo-3-(6-Chloropyridin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(5-Bromopyridin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(6-Bromopyridin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(5-Bromopyrimidin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
5 exo-3-(Quinazolin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(5-Trifluoromethylpyridin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(3,4,5-Tribromothiophen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Bromothiophen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
endo-3-(3-Bromo-5-chloro-thiophen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
10 endo-3-(4-Bromo-5-chloro-thiophen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
endo-3-(3,4,5-Trichlorothiophen-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(2,3-Dichlorophenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(3,4-Dichlorophenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(3,4,5-Trichlorothiophen-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
15 exo-3-(3-Chloro-4-fluorophenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(3-Chloro-phenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Chloro-3-fluorophenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Chloro-phenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(2-Chloro-3-trifluoromethyl-phenoxy)-8-H-8-azabicyclo[3.2.1]octane;
20 exo-3-(Fluoren-9-one-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(1,2-Benzoisothiazol-3-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(3,4-Dichlorophenylthio)-8-methyl-8-azabicyclo[3.2.1]octane;
endo-3-(3,4-Dichlorophenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Chloro-3-trifluoromethylphenoxy)-8-H-8-azabicyclo[3.2.1]octane;
25 exo-3-(2-Dibenzofuranyloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(1-Naphthyloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(2-Naphthyloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(3-Chloro-4-cyanophenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Chloro-3-methylphenoxy)-8-H-8-azabicyclo[3.2.1]octane;
30 exo-3-(4-Chloronaphthalen-1-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(Quinolin-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(5-Chloro-pyridin-2-yl)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Methoxyphenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(Isoquinolin-5-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
35 exo-3-(6-Bromo-naphthalen-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Bromo-3-chloro-phenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(Quinolin-6-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Trifluorophenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Cyanophenoxy)-8-H-8-azabicyclo[3.2.1]octane;

- exo*-3-(Quinolin-8-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Methylphenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(6-Chloropyridin-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(5-Bromopyridin-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
5 *exo*-3-(6-Bromopyridin-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(Isoquinolin-1-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(3-Trifluoromethoxyphenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Trifluoromethoxyphenoxy)-8-H-8-azabicyclo[3.2.1]octane;
10 *exo*-3-(6-Methoxypyridin-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(5-Trifluoromethylpyridin-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(6-Ethoxypyridin-2-yloxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(4-Fluoro-3-trifluoromethylphenoxy)-8-H-8-azabicyclo[3.2.1]octane;
exo-3-(2,3-Dichlorophenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
15 *exo*-3-(3,4-Dichlorophenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(3-Chloro-4-fluorophenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Chloro-3-fluorophenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(2-Chloro-3-trifluoromethylphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
20 *exo*-3-(3-Chloro-phenoxy)-8-methyl-8-azabicyclo[3.2.1]octane
exo-3-(4-Chloro-phenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(Fluoren-9-one-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(3,4-Dichlorophenylthio)-8-methyl-8-azabicyclo[3.2.1]octane;
25 *exo*-3-(1-Naphthyoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(2-Naphthyoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Chloro-3-trifluoromethylphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(3-Chloro-4-cyanophenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
30 *exo*-3-(2-Dibenzofuranyloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Chloronaphthalen-1-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Chloro-3-methylphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Methoxyphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
35 *exo*-3-(7-Methoxynaphthalen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(6-Methoxynaphthalen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Bromo-3-chloro-phenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(Isoquinolin-5-yl)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(6-Bromo-naphthalen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
40 *exo*-3-(3-Methoxyphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Cyanophenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(Quinolin-6-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(1,2,3,4-Tetrahydronaphthalen-6-yloxy)-8-methyl-8-
45 azabicyclo[3.2.1]octane;

- exo*-3-(4-Trifluoromethylphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Methylphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(8-Quinolinyl)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(5-Indanyloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
- 5 *exo*-3-(4-Methoxynaphthalen-1-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(Indol-5-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(3-Trifluoromethoxyphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(4-Trifluoromethoxyphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
10 *exo*-3-(4-Fluoro-3-trifluoromethylphenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
endo-3-(3,4-Dichlorophenoxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(3,4-Dichlorophenoxy)-8-(2-hydroxyethyl)-8-azabicyclo[3.2.1]octane;
exo-3-(3,4-Dichlorophenoxy)-8-(cyanomethyl)-8-azabicyclo[3.2.1]octane;
exo-3-(3,4-Dichlorophenoxy)-8-(cyclopropylmethyl)-8-azabicyclo[3.2.1]octane;
15 *exo*-3-(3,4-Dichlorophenoxy)-8-(allyl)-8-azabicyclo[3.2.1]octane;
exo-3-(3,4-Dichlorophenoxy)-8-(methoxyethyl)-8-azabicyclo[3.2.1]octane;
exo-3-(6-Methoxypyridin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(6-Ethoxypyridin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
20 *exo*-3-(6-Hydroxy-pyridin-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-3-(6-Cyano-naphthalen-2-yloxy)-8-methyl-8-azabicyclo[3.2.1]octane;
exo-(3,4-Dichloro-phenyl)-(8-methyl-8-aza-bicyclo[3.2.1]oct-3-yl)-amine;
25 *endo*-(3,4-Dichloro-phenyl)-(8-methyl-8-aza-bicyclo[3.2.1]oct-3-yl)-formylamine;
exo-(3,4-Dichloro-phenyl)-(8-methyl-8-aza-bicyclo[3.2.1]oct-3-yl)-formylamine;
30 or any of its isomers or any mixture of its isomers, or a pharmaceutically acceptable salt thereof.
11. A pharmaceutical composition, comprising a therapeutically effective amount of a compound of any one of claims 1-10, or any of its isomers or any mixture of its isomers, or a pharmaceutically acceptable salt thereof, together with at least one pharmaceutically acceptable carrier, excipient or diluent.
12. Use of the chemical compound of any of claims 1-10, or any of its isomers or any mixture of its isomers, or a pharmaceutically acceptable salt thereof, for the manufacture of a medicament.
- 35 13. The use according to claim 12, for the manufacture of a pharmaceutical pharmaceutical composition for the treatment, prevention or alleviation of a disease or a disorder or a condition of a mammal, including a human, which disease, disorder or condition is responsive to inhibition of monoamine neurotransmitter re-uptake in the central nervous system.

14. The use according to claim 13, wherein the disease, disorder or condition is mood disorder, depression, atypical depression, major depressive disorder, dysthymic disorder, bipolar disorder, bipolar I disorder, bipolar II disorder, cyclothymic disorder, mood disorder due to a general medical condition, substance-induced mood disorder, pseudodementia, Ganser's syndrome, obsessive compulsive disorder, panic disorder, panic disorder without agoraphobia, panic disorder with agoraphobia, agoraphobia without history of panic disorder, panic attack, memory deficits, memory loss, attention deficit hyperactivity disorder, obesity, anxiety, generalized anxiety disorder, eating disorder, Parkinson's disease, parkinsonism, dementia, dementia of ageing, senile dementia, Alzheimer's disease, acquired immunodeficiency syndrome dementia complex, memory dysfunction in ageing, specific phobia, social phobia, post-traumatic stress disorder, acute stress disorder, drug addiction, drug misuse, cocaine abuse, nicotine abuse, tobacco abuse, alcohol addiction, alcoholism, pain, chronic pain, inflammatory pain, neuropathic pain, migraine pain, tension-type headache, chronic tension-type headache, pain associated with depression, fibromyalgia, arthritis, osteoarthritis, rheumatoid arthritis, back pain, cancer pain, irritable bowel pain, irritable bowel syndrome, post-operative pain, post-stroke pain, drug-induced neuropathy, diabetic neuropathy, sympathetically-maintained pain, trigeminal neuralgia, dental pain, myofacial pain, phantom-limb pain, bulimia, premenstrual syndrome, late luteal phase syndrome, post-traumatic syndrome, chronic fatigue syndrome, urinary incontinence, stress incontinence, urge incontinence, nocturnal incontinence, sexual dysfunction, premature ejaculation, erectile difficulty, erectile dysfunction, eating disorders, anorexia nervosa, sleep disorders, autism, mutism, trichotillomania, narcolepsy, post-stroke depression, stroke-induced brain damage, stroke-induced neuronal damage or Gilles de la Tourettes disease.
15. A method for treatment, prevention or alleviation of a disease or a disorder or a condition of a living animal body, including a human, which disorder, disease or condition is responsive to inhibition of monoamine neurotransmitter re-uptake in the central nervous system, which method comprises the step of administering to such a living animal body in need thereof a therapeutically effective amount of a compound according to any one of the claims 1-10, or any of its isomers or any mixture of its isomers, or a pharmaceutically acceptable salt thereof.